

ABSTRACT

There is disclosed an ink jet printhead which comprises a plurality of nozzles 3 and a bubble forming chamber 7 corresponding to each nozzle respectively. At least one heater element 10 disposed in each bubble forming chamber 7 to heat a bubble forming liquid 11 to a temperature above its boiling point to form a gas bubble 12 therein. The generation of the bubble 12 causes the ejection of a drop 16 of an ejectable liquid (such as ink) through an ejection aperture 5 in each nozzle 3, to effect printing. The gas bubble collapses to a collapse point 17 spaced from the heater element 10, and the heater element has two planes of symmetry intersecting along the nozzle axis. A heater element with two planes of symmetry intersecting along the nozzle axis will generate a symmetrical bubble centrally aligned with the aperture. This gives the nozzle an ejected drop trajectory along the nozzle axis. Configuring the heater element with two planes of symmetry and a void at the bubble collapse point gives the nozzle a trajectory that is directly along its axis as well as avoiding the corrosive problems associated with cavitation.